Claim Rejections - 35 USC §112

In the Office Action, the Examiner rejects Claims 26-30 and 43-47 under 35 USC §112, first paragraph, as failing to comply with the written description requirement. This rejection is respectfully traversed.

In particular, the Examiner contends that "[t]here is no support in the specification as originally filed for that, in the claimed context, the nozzle and the first and second pixel electrodes are connected by a single application liquid." Applicants respectfully disagree.

Independent Claims 26 and 43 recite that "the nozzle and the first and second pixel electrodes are connected through the application liquid." This is supported, for example, by Figs. 1B, 1C, 13B, 13C, 14A and 14B as originally filed. For example, Fig. 1B shows a nozzle 116a, pixel portion 111and application liquid 114a through which the pixel electrodes are connected to the nozzle. See e.g. page 7 of the specification. Therefore, it is respectfully submitted that this claimed feature is supported by the application as filed, and it is respectfully requested that this rejection be withdrawn.

Claim Rejections - 35 USC §103

The Examiner also has the following rejections under 35 USC §103(a):

A. Claims 6, 10-12, 19-20 22-25, 31, 33-37 and 39-42 as being unpatentable over Miyashita et al. (WO98/24271; US Publication 2002/0041926) in view of Horike (US 4,281,332), Iguchi (WO98/27579; US Publication 2002/0009536) and Kasubuchi et al. (US 3,878,517)

B. Claims 7, 21, 32 and 38 are rejected as being unpatentable over Miyashita in view of Horike, Iguchi and Kasubuchi and further in view of Fujimura.

C. Claims 26, 28-30, 43 and 45-47 are rejected as being unpatentable over Miyashita in

view of Horike, Iguchi and Kasubuchi and further in view of Kurosawa et al. (US 6,057,647)

D. Claims 27 and 44 are rejected as being unpatentable over Miyashita in view of Horike, Iguchi and Kasubuchi and Kurosawa, and further in view of Fujimura.

Each of these rejections is respectfully traversed.

As previously explained, the claims of the present application are directed to a method wherein application liquid is discharged while the nozzle and the pixel column are directly connected through the application liquid comprising said organic light-emitting material. Applicants respectfully submit that none of the cited references disclose or suggest these claimed features.

The Examiner asserts that these features are shown by Iguchi and that it would have been obvious to combine Iguchi with the other references to arrive at the claimed invention.

However, as Applicants previously asserted, the §103 rejection lacks the requisite motivation or suggestion to combine Iguchi with the other cited references. Specifically, the Examiner appears to be relying on MPEP §2144.07 as providing support for the combination of the references in this rejection, and states that "the selection of something based on its known suitability for its intended use has been held to support a *prima facie* case of obviousness." (emphasis added). However, as Applicants previously pointed out, MPEP §2144.07 actually states that "[t]he selection of **a known material** based on its suitability for its intended use supported a prima facie obviousness determination..." (emphasis added). It is not merely the selection of "something" that will satisfy the test for this MPEP section, but it is the selection of a known material. This is further emphasized by next paragraph in this MPEP section which states that selection of a known plastic to make a container of a type made of plastics prior to the invention was held to be obvious in In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Hence, it appears that this MPEP section is only applicable

in a case where the two prior arts references are at least performing the same function (see end of MPEP §2144.07 citing Ryco, Inc. v. Ag-Bag, Corp., 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988)).

In his Response to Arguments, the Examiner agrees that the case cited in MPEP 2144.07 involved a material, but contends that "the situation of selecting an appropriate method to accomplish a desired result is so clearly analogous to the selection of a particular material to achieve a desired function to justify the Examiner's revised language." Again, Applicants continue to disagree.

In particular, there is simply no support for the Examiner's position that this MPEP section provides a basis for the proposed combination of references. MPEP 2144.07 does not mention stretching the interpretation of this MPEP section to cover methods. Nor has the Examiner cited any case law in support of his contention (the case cited by the Examiner in the Office Action is directed to selection of a known material). Hence, it is respectfully submitted that the Examiner's basis for this combination of references to arrive at the claimed invention is improper.

Further, the Examiner contends that Iguchi can be applied to the claimed invention because a plasma display is a particular type of electroluminescent display (see e.g. page 3 in Office Action). Applicants previously pointed out that it is well known to those skilled in the art that a plasma display is a very different type of display than an electroluminescent (EL) display. In his Response to Arguments, the Examiner argues that "all plasma displays are inherently electroluminescent displays" because "all plasma displays operate by applying current to cause a material to glow (that is, by electroluminescence)." Applicants disagree and respectfully submit that this is contrary to what is known to those skilled in the art.

For example, Iguchi states:

> "[0004] A plasma display has electric discharge caused in discharge spaces formed between a front glass substrate and a rear glass substrate. The discharge yield ultraviolet rays with 147 nm as the central wavelength to be generated from xenon gas, and the ultraviolet rays excite phosphor to allow display. If discharge cells respectively selectively coated with any of phosphor emitting light of red, green and blue are caused to emit light by a drive circuit, they can display in full color."

Hence, a plasma display is caused by applying a voltage to a gas (which in Iguchi is xenon), not to a phosphor. In contrast, an electroluminescence is caused by applying voltage to an electroluminescent material in EL display.

The Examiner further contends that Applicants cannot support their position by evidence. Accordingly, Applicants are submitting herewith a printout from the following website to support its position that plasma displays are caused by applying a voltage to a gas, not to a phosphor:

http://edevice.fujitsu.com/fhp/pdp/discharge_e.html

Hence, it respectfully submitted that Iguchi does not teach applying liquid comprising electroluminescent material for causing electroluminescence, but rather only teaches applying phosphor paste for causing photoluminescence, which is different than the claimed invention.

The Examiner, however, contends that Applicants position that Iguchi teaches photoluminscent phosphors which emits light by absorbing light is incorrect as the Examiner argues that Iguchi teaches that the phosphor glows in response to electric fields (citing [0148] of Iguchi). However [0148] states:

> "[0148] The rear substrate must have a phosphor layer formed on a substrate on which electrodes for applying a drive voltage and barrier ribs for partitioning electric discharge cells are formed. Furthermore, on the substrate, a dielectric layer may be formed for stabilization of electric discharge. The substrate can be a soda glass substrate or a glass substrate of PD200 (produced by Asahi Glass), etc. marketed for the plasma display, or a ceramic substrate. As the substrate, it is

preferable to use a 1 to 3 mm thick glass substrate, and more preferable is a 2 to 3 mm thick glass substrate."

Hence, there is no teaching in [0148] of Iguchi that phosphor glows in response to electric fields.

The Examiner further contends that the phosphors of [0157] in Iguchi are electroluminescent phosphors. [0157] of Iguchi, however, merely states:

> [0157] The phosphor powders used emit light of red, green and blue. As the phosphor powders used in the present invention, those emitting light of red include Y_2O_3:Eu, YVO_4:Eu, (Y, Gd)BO_3:Eu, Y_2O_3S:Eu, .gamma.-$Zn_3(PO_4)_2$: Mn, (ZnCd)S: Ag+In_2O_3, etc. Those emitting light of green include Zn_2GeO_2:Mn, $BaAl_{12}O_{19}$:Mn, Zn_2SiO4:Mn, $LaPO_4$:Tb, ZnS:Cu,Al, ZnS:Au,Cu,Al, (ZnCd)S:Cu,Al, Zn_2SiO_4:Mn,As, $Y_3Al_5O_{12}$:Ce, $CeMgAl_{11}O_{19}$:Tb, Gd_2O_2S:Tb, $Y_3Al_5O_{12}$:Tb- , ZnO:Zn, etc. Those emitting light of blue include $Sr_5(PO_4)_3Cl$:Eu, $BaMgAl_{14}O_{23}$:Eu, $BaMgAl_{16}O_{27}$:Eu, $BaMg_2Al_{14}O_{24}$:Eu, ZnS:Ag+red pigment, Y_2SiO_3:Ce, etc."

Hence, there is no description in this paragraph in Iguchi that the phosphors of [0157] are electroluminescent phosphors.. Rather, the paragraph states that "the phosphor used [to] emit light." Applicants submit that based on the rest of the disclosure of the reference that this means photoluminescence.[1]

Accordingly, there is no motivation or suggestion to modify Miyashita, which teaches forming an electroluminescent layer by an ink-jet method using an electroluminescent material, in view of Iguchi which applies phosphor paste onto a substrate with a plurality of barrier ribs from a paste applicator with a plurality of outlet holes. Miyashita and Iguchi are very different from each other. Therefore, the Examiner's rejection continues to lack the necessary motivation or suggestion to combine Iguchi with the other cited references, and the rejection based thereon is improper.

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[1] The Examiner further states that zinc sulfide is recognized as an electroluminescent material. However, Iguchi uses phosphor paste for forming a phosphor layer for a plasma display, not for electroluminescent material for an EL display device.

Accordingly, for at least the above-stated reasons, it is respectfully submitted that the claims of the present application are patentable over the cited references, and it is requested that these rejections be withdrawn.

Conclusion

Therefore, the present application is now in an allowable condition and should be allowed.

Please charge our deposit account 50/1039 for any further fee for this amendment.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,

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